

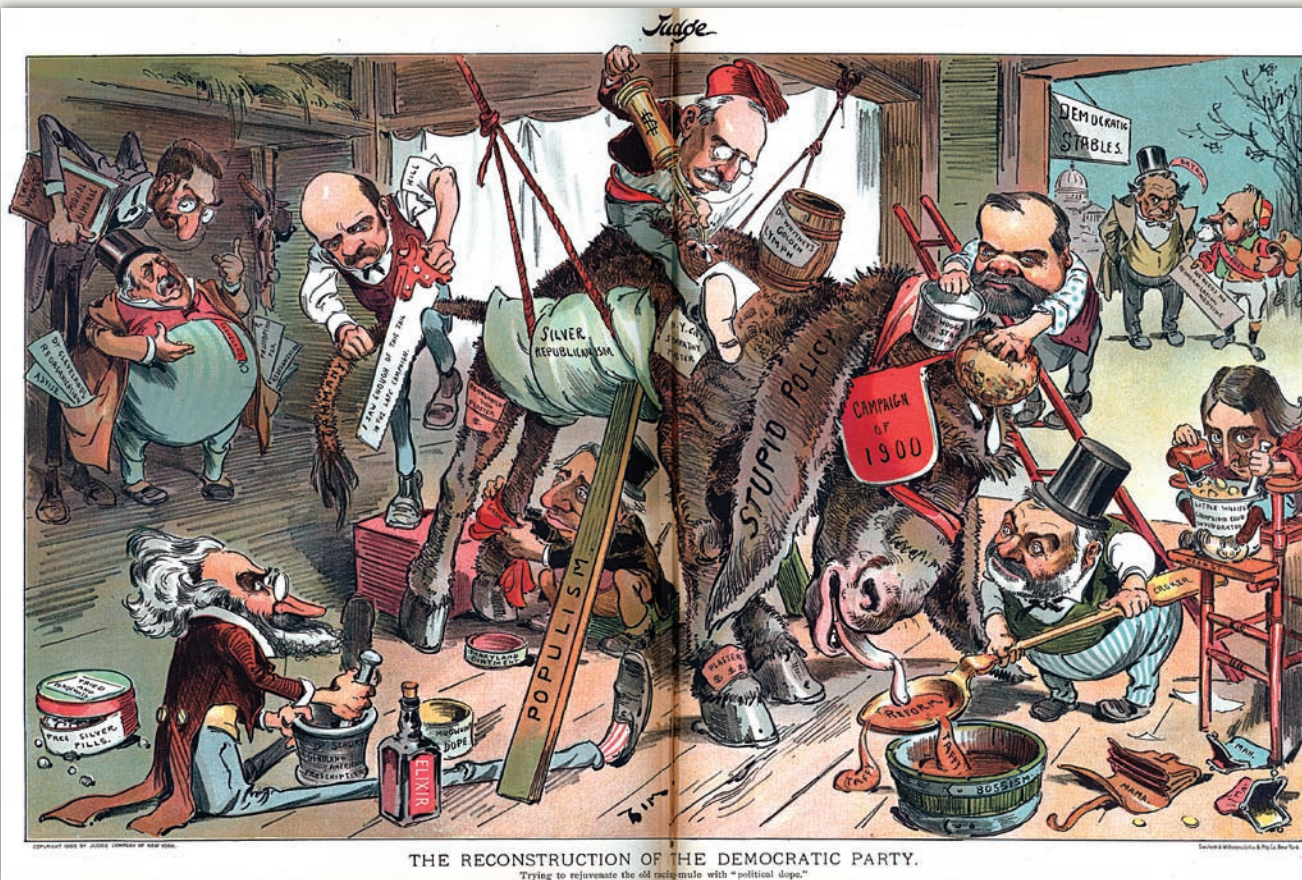
# Drugs and Biologics: Safety and Availability



by Suzanne White Junod, Ph.D.

Images of inoculation and vaccination are rife in the pages of the turn-of-the-century *Puck* and *Judge* magazines, undoubtedly because they represented a new way of looking at the world—through scientific eyes. Of course, the two weeklies used the imagery of analytical laboratories and serum produc-

tion for vaccination as a leitmotif for their portrayals of the political conundrums of the day, rather than actually talking about the 1902 Biologics Control Act or the 1906 Pure Food and Drugs Act. Nonetheless, both prints are remarkably accurate in their detailed portrayals of scientific life under each act.



*The Reconstruction of the Democratic Party* (*Judge*, Feb. 15, 1900).—This elaborate lithograph offers a complicated commentary on the many barriers to Democratic domination in the presidential election of 1900. It was the 1900 election, in fact, which ushered Republican Theodore Roosevelt into the White House. Although it employs medical imagery throughout, its principal focus is on the process by which serum for inoculations was produced in hygienic stables using horses. Teddy Roosevelt soon became the poster boy for the political movement known as Progressivism. Patrician by birth, rough-rider by reputation, he nonetheless was a political pragmatist. In addition to signing the 1906 Pure Food and Drugs Act, his bold activism and relentless optimism inspired his advocates, intimidated his foes, and confounded much of the world as he tackled tough issues and built new bridges—including the Panama Canal—both nationally and internationally.

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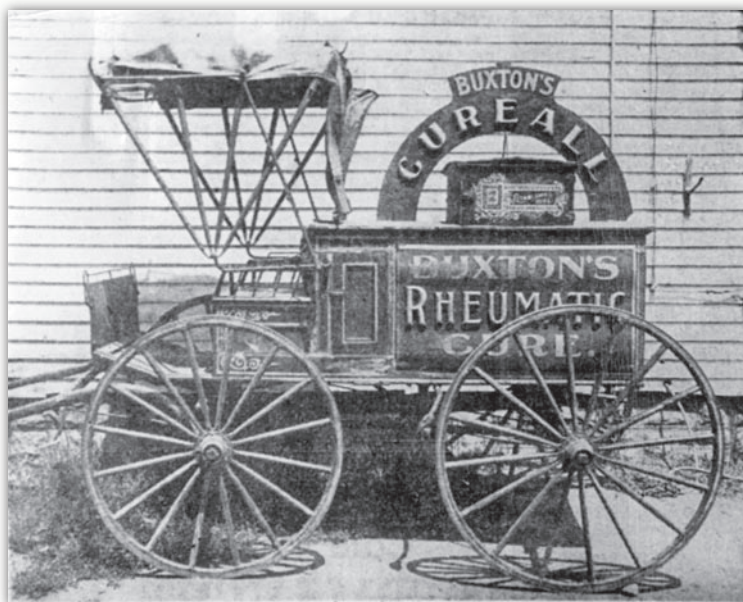




THE NEW SENATORIAL BEVERAGE.

Uncle Sam, the great chemist, analyzes the Beverage and discovers in it qualities that exceed his expectations.

*The New Senatorial Beverage* (Judge, Feb. 10, 1900).—Most Americans at the turn-of-the-century were interested in expanding commercial markets, not just domestically, but internationally as well. Advances in transportation and communication made these expansionist aims much more than mere talk. Old Republicans traditionally had held, however, that U.S. industry needed to be protected from foreign competition in the domestic marketplace. And even if American goods were to dominate world markets and make such protectionist policies unnecessary as some thought likely, questions remained. Would expanded markets, for example, inevitably lead to expanded territory? Senators Albert J. Beveridge of Indiana and Henry Cabot Lodge of Massachusetts, along with Theodore Roosevelt, were supporters of expansionism—one reason (among many) that they came to be referred to as Progressives. Even though it is labeled “Uncle Sam’s Laboratory,” this is as clear an image of the Bureau of Chemistry, at the turn-of-the-century, as was ever published at the time.



*Buxton's Cureall* (M.W. Organ).—This old medicine wagon is all that is left of the Buxton Medicine Company, a New England company owned and operated by a Quaker family that survived into the 1940s.



Passed in 1902, shortly after an outbreak of tetanus in St. Louis as well as several smaller outbreaks nationally due to contaminated smallpox vaccine and diphtheria anti-toxin, the Biologics Control Act authorized the Hygienic Laboratory of the Public Health Service to issue regulations governing the commercial production of vaccines, serums, toxins, anti-toxins, and similar products of biological origin to ensure

their purity and potency. Horses were used most often for the cultivation of the plasma serum products, but given the difficulties their use posed it was perhaps inevitable that someone reading *Puck* would suggest a humorous alternative.

In place of more traditional methods of punishment, a Baltimore physician suggested that convicted criminals could be used for the cultivation of antitoxins.

### *The New Penology*<sup>1</sup>

*Abandon the penology we've studied such a time;  
Behold in toxicology the scourge that fits the crime!  
Is 'Rastus captured stealing fowls behind the hen-house locks,  
No fine the judge imposes, but ten days of chicken pox.*

*Let roisterers at midnight, whom the wagon carries off,  
Expend their surplus energy in a siege of whooping cough,  
The burgler who breaks in at night, to prowl about our bed,  
A term of measles will persuade to go break out instead.*

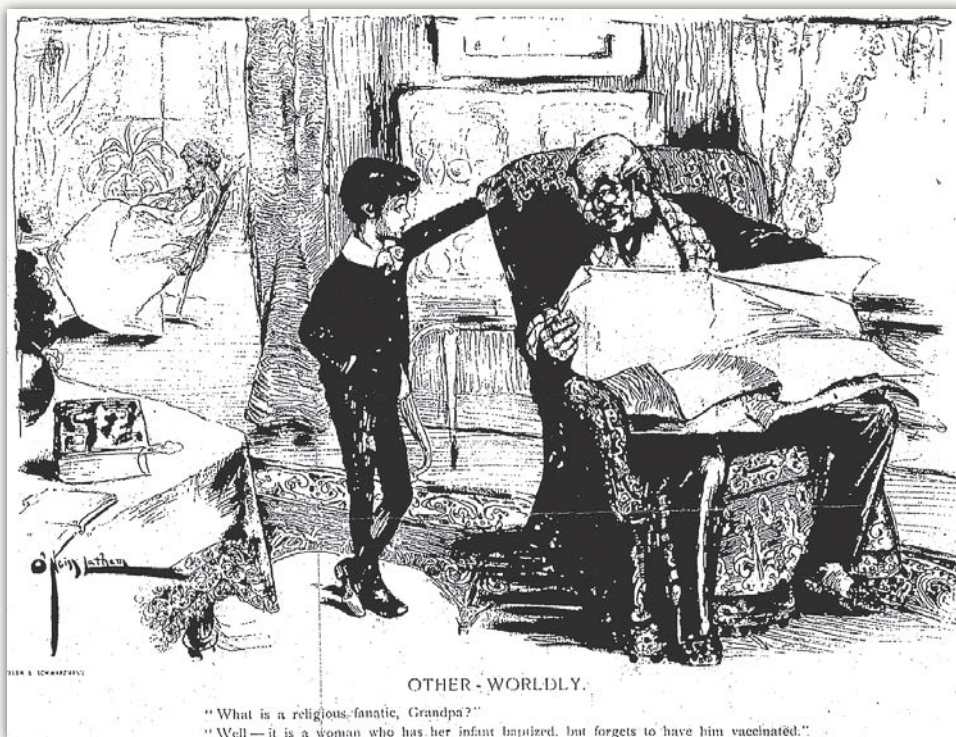
*Our fuddled dipsomaniacs will be reformed again,  
Condemned to sixty days in jail with water on the brain.*

*While as to automobilists who so insist on speed,  
And pass the corners on our streets much faster than they need?  
We'll let them go again to ride, and toy with brake and level,  
After inoculation with genuine slow fever!*

<sup>1</sup> 62 PUCK no. 1607 (Dec. 18, 1907).

He decided he would never eat, unless he felt like eating,  
And give up foods and liquids which his palate dreaded meeting.  
He aimed to die in comfort: — but that was long ago,  
Of late he counts obesity his worst and only foe.

Frank Swain Bailey.



*Other-Worldly* (43 Puck no. 1094 (Mar. 30, 1898)).—Even the grandfather in this family, probably one of its most conservative members, supports vaccination.

A skeptic on most issues, *Puck* did not vacillate on the issue of childhood vaccination.

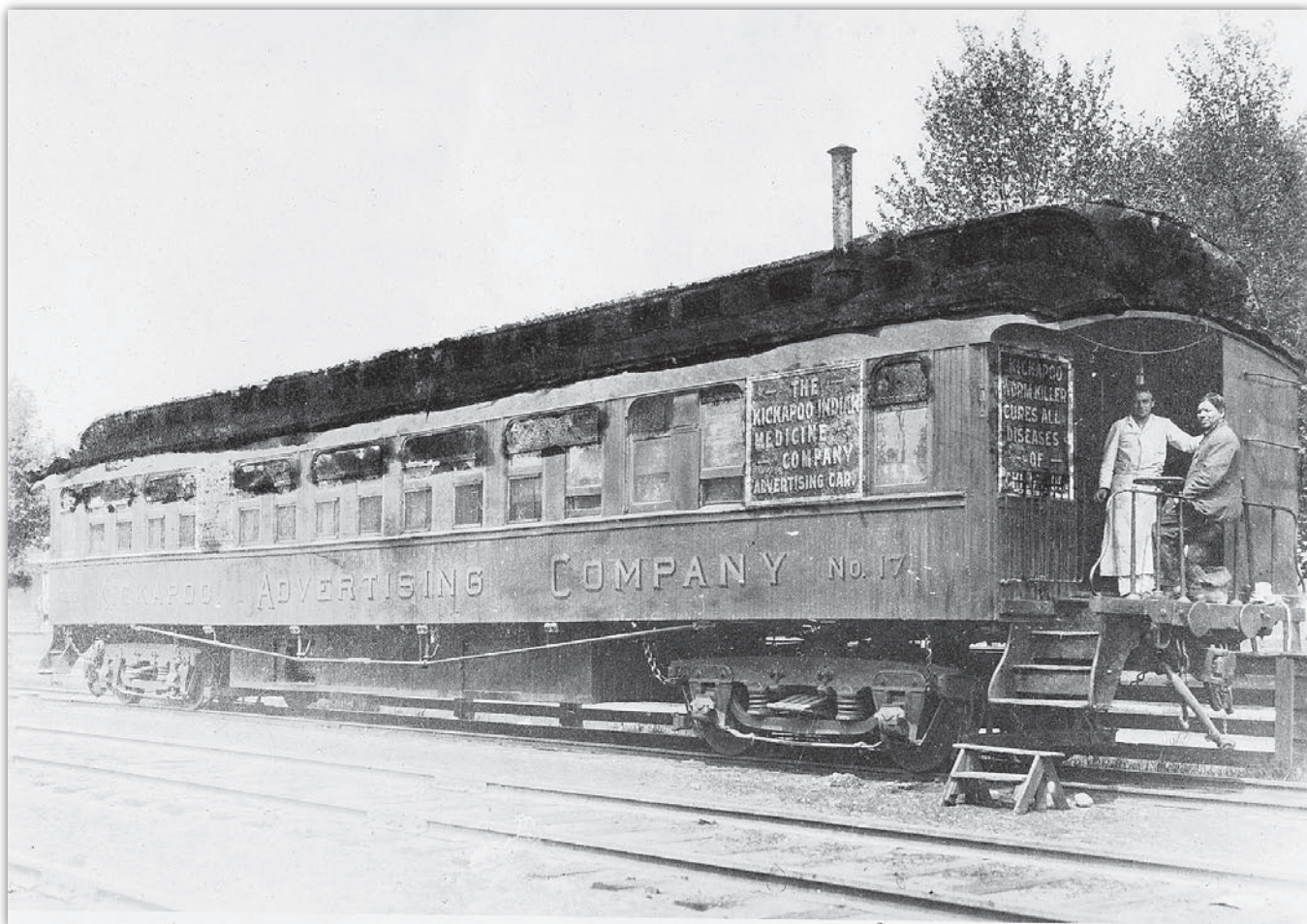
Although so-called “ethical drugs” were making some inroads on the patent medicine business at the turn-of-the-century, medicines sold from the back of carts or by whistle stops from traveling railroad cars were far more common sights on the national landscape. The excesses of patent medicines and patent medicine advertising were tolerated, in large part, because the business itself was so lucrative, the advertisements so entertaining, and the alternatives so paltry, that it must have seemed much easier to satirize the U.S. *materia medica* than to reform it. Nonetheless, in an attempt to fight what they perceived as

the “nostrum evils,” the American Medical Association and the American Pharmaceutical Association joined forces in 1905 to form a federal bureau to certify pharmaceuticals, which was funded by industry itself. Although it was a totally voluntary program, certified drugs could display the statement “Accepted by the Council of Pharmacy and Chemistry of the American Medical Association” on their product label. The collaborative effort lasted until funds ran out in 1955 and the Council was subjected to several lawsuits. Although this voluntary program had more flexibility than the Food and Drug Administration had under statute, drug industries still were responsible for compliance with the federal food and drug laws.  $\Delta$



*A Sad State of Affairs* (44 *Puck* no. 1121 (Aug. 31, 1898)).—Fear of whooping cough kept this child from playing with friends, according to this *Puck* cartoon commentary. Today, childhood diphtheria, pertussis (whooping cough), and tetanus (DPT) shots make the disease a rarity.





*Kickapoo Advertising Company* (John Hannafin (1911)).—Indian images always sold well, especially when accompanied by “secret tales of Indian life.” A Kickapoo tribe actually existed and, in 1889, the Kickapoo Indian Agency provided Kickapoo braves for traveling medicine shows.